

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8176 (1976): Dissectors, Penfield's Pattern [MHD 7: Neurosurgery Instruments Implants and Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

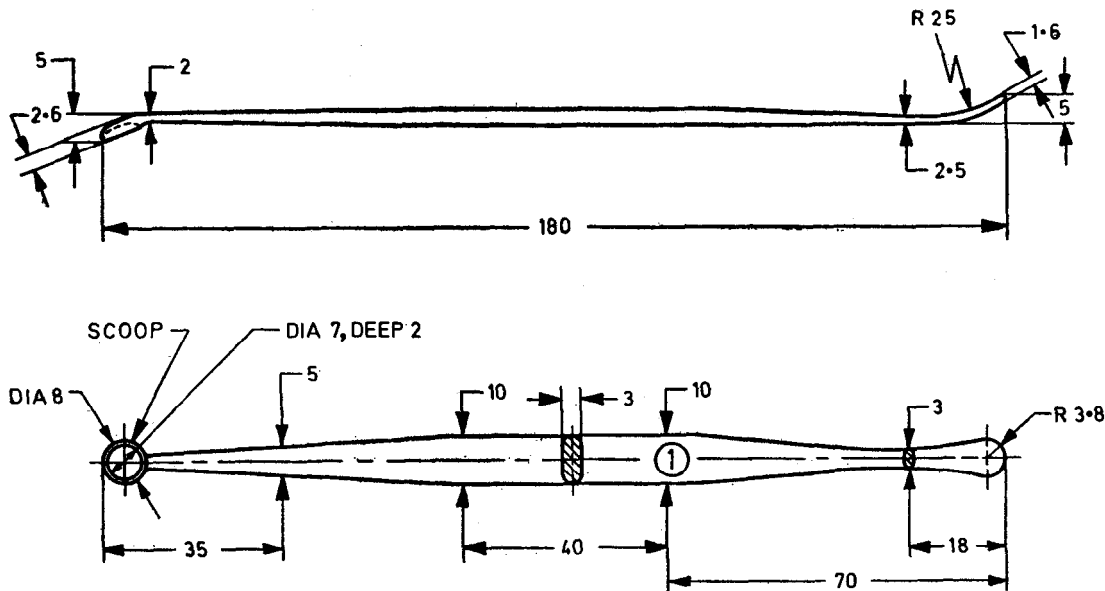
BLANK PAGE





Indian Standard
SPECIFICATION FOR
DISSECTORS, PENFIELD'S PATTERN

- 1. Scope** — Dimensions, performance and other requirements for Penfield's dissectors in a set of four used in neurosurgery.
- 2. Material** — Stainless steel conforming to Designation 30Cr13 of IS : 6603-1972 'Specification for stainless steel bars and flats'.
- 3. Type** — The Penfield's dissectors shall be of the following types:
- Type 1 — Double ended, with broad curved dissector and sharp round scoop
 - Type 2 — Double ended, with sharp round scoop and a waxpacker
 - Type 3 — Double ended, with full curved large dissector and a waxpacker
 - Type 4 — Blunt ended, light, slightly curved dissector with handle
- 4. Shape and Dimensions** — As shown in Fig. 1 to 4.



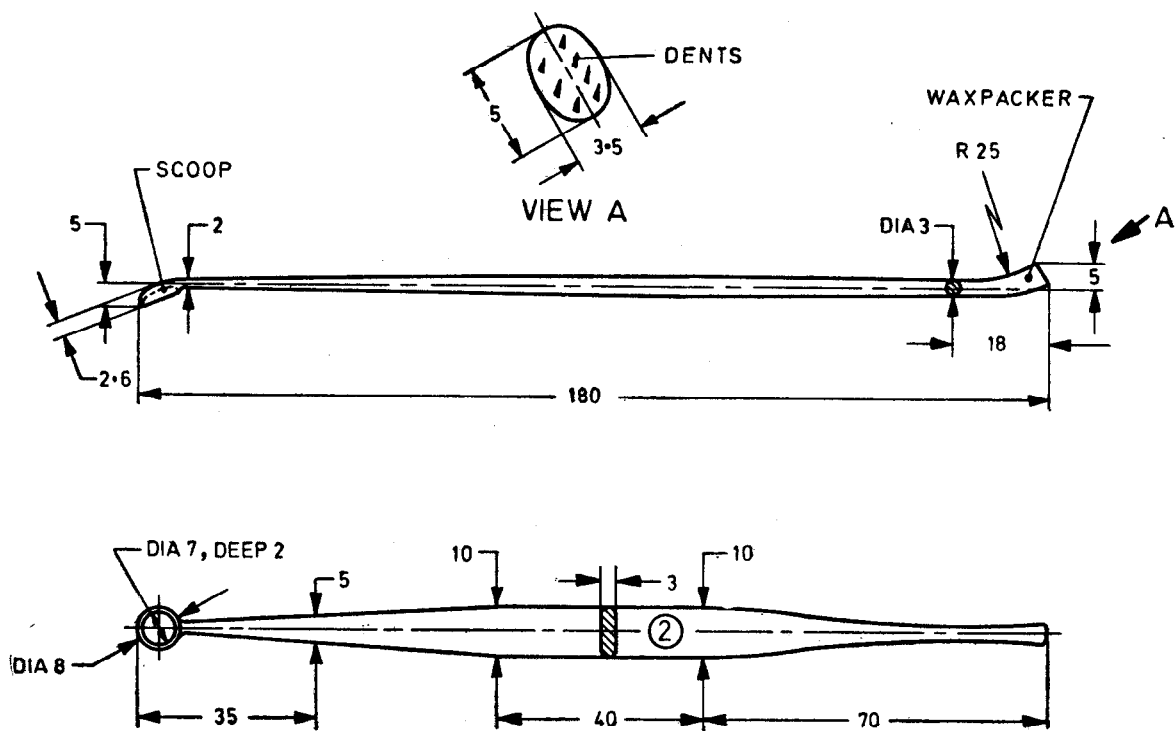
All dimensions in millimetres.

FIG. 1 DISSECTOR, DOUBLE ENDED, WITH BROAD CURVED DISSECTOR AND SHARP ROUND SCOOP, PENFIELD'S PATTERN, TYPE 1

- 4.1** A deviation of ± 2.5 percent shall be allowed on all dimensions.
- 4.2 Mass** — For different types of dissectors, the mass shall be as given below:

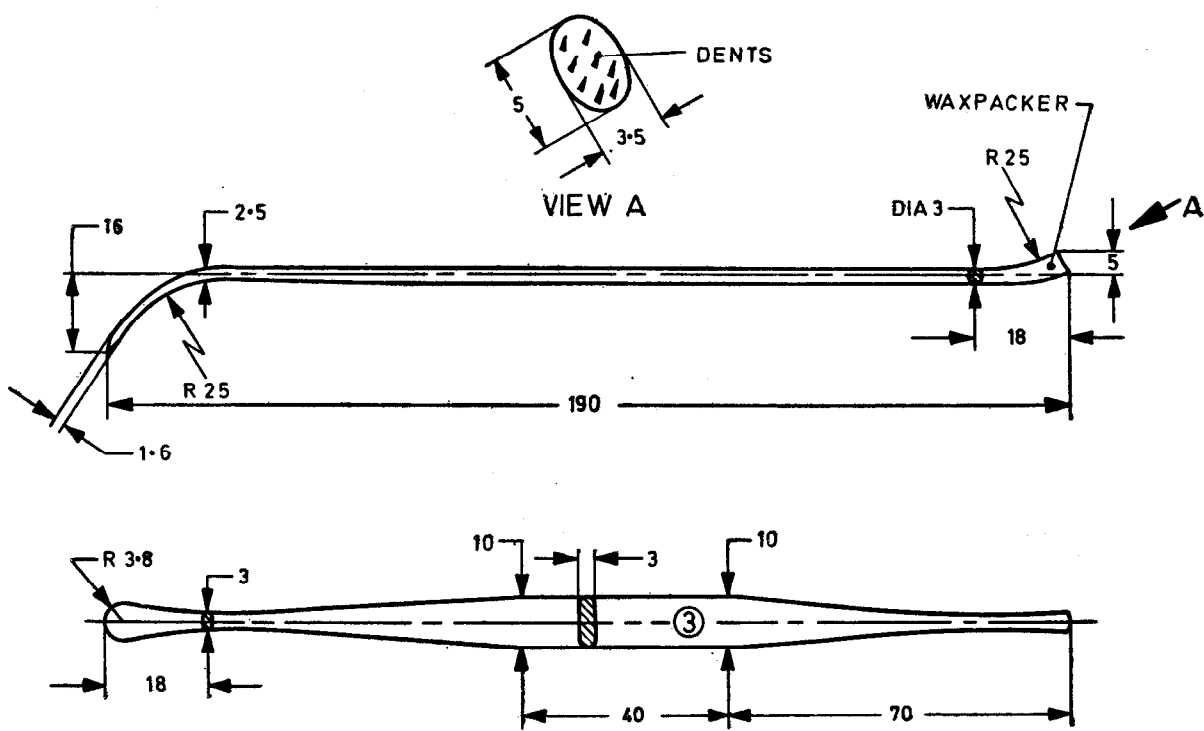
Type	Mass g
1	32 ± 3
2	32 ± 3
3	35 ± 3
4	40 ± 3





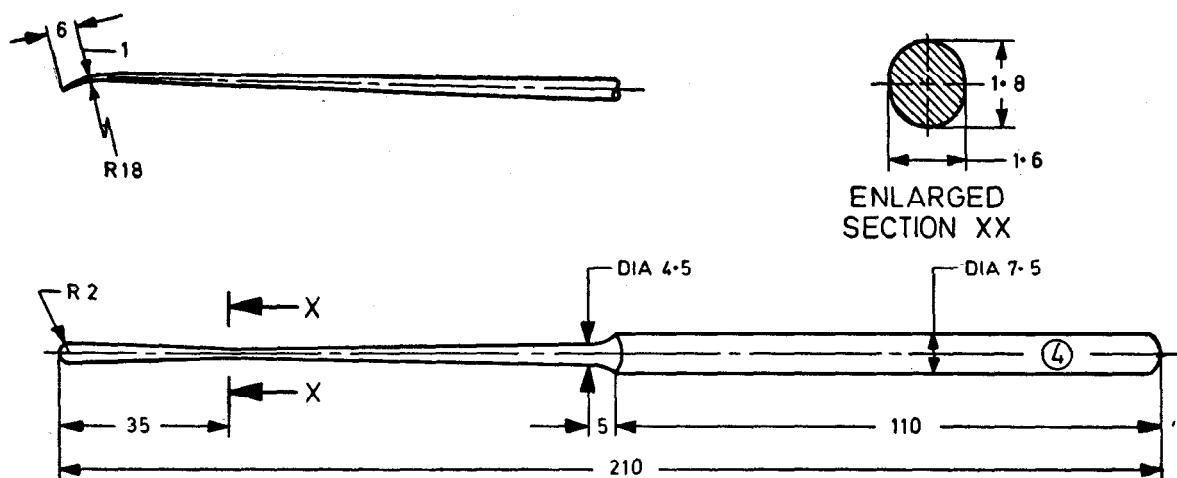
All dimensions in millimetres.

FIG. 2 DISSECTOR, DOUBLE ENDED, WITH SHARP ROUND SCOOP AND A WAXPACKER, PENFIELD'S PATTERN, TYPE 2



All dimensions in millimetres.

FIG. 3 DISSECTOR, DOUBLE ENDED WITH FULL CURVED DISSECTOR AND A WAXPACKER, PENFIELD'S PATTERN, TYPE 3



All dimensions in millimetres.

FIG. 4 DISSECTOR, SLIGHTLY CURVED, BLUNT ENDED, LIGHT WITH HANDLE, PENFIELD'S PATTERN, TYPE 4

5. Workmanship and Finish

5.1 All types of dissectors shall be forged one-piece.

5.2 All the surfaces shall be finished smooth and free from burrs, pits, cracks and other surface defects. The edges shall be even and slightly rounded off. The working ends shall be properly shaped and rounded all along except, where so specified.

5.3 The edges of the scoop shall be reasonably sharp. It shall have a flat bottom. The waxpacker end shall have a concave surface with small sharp indentations over it. It shall have reasonably sharp edges.

5.4 The dissectors shall be polished bright and passivated.

6. Heat Treatment — The dissectors shall be hardened and tempered to give a hardness of 380 to 430 HV.

7. Tests

7.1 *Load Test* — The instrument shall be clamped horizontally at the middle in a vice so that its working ends face upwards. A proof-load of 100 N (10 kgf approximately) shall be applied downwards, gradually to each working end for a period of 5 minutes. On removal of the load, the instrument shall not take a permanent set or break.

7.2 *Flexibility* — The instrument shall be clamped as in 7.1. By a gradual application of force, its two ends shall be brought closer by a distance of 10 mm. On removal of the force, the ends shall regain original position.

7.3 *Scoop Sharpness Test* — The lip of the scoop for Type 1 and Type 2 dissectors shall be made to scrape vigorously over the surface of a fresh piece of bone by applying maximum pressure with which the dissector is supposed to be used. After a continuous scrapping for one minute, the lip of the scoop shall not show any sign of distortion or blunting.

7.4 *Corrosion Resistance* — The sample shall be subjected to the boiling and autoclaving tests as prescribed in IS: 7531-1975 'Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments'. At the end of the test, no red stains or spots on the sample shall be observed, but the dulling of the polished surface may be permitted.

8. Marking — The dissectors shall be marked with the following by etching:

- Manufacturer's name, initials or recognized trade-mark;
- The words 'Stainless Steel'; and
- Type.

8.1 *ISI Certification Marking* — Details available with the Indian Standards Institution.

9. Packing — Each dissector shall be wrapped in tissue paper, packed in moisture-proof paper and shall be put in a card board carton. Alternatively, the packing may be done as agreed to between the purchaser and the supplier.